

AMENDMENTS

In the Claims:

Please amend the claims as indicated hereafter.

1. (Currently Amended) A single logical screen (SLS) graphical display system, comprising:

- an interface configured to receive graphical data defining an image;
- a plurality of display devices; and
- a plurality of graphical acceleration units, each of said plurality of graphical acceleration units respectively interfaced with one of said plurality of display devices and configured to render a portion of said graphical data to said one display device such that said display devices display said image as a single logical screen, wherein at least one of said graphical acceleration units comprises:
 - a first graphical pipeline configured to receive and process a graphical command, said first graphical pipeline configured to render graphical data from said graphical command;
 - a second graphical pipeline configured to ~~render graphical data~~ receive and process said graphical command; and
 - a compositor interfaced with said first and second graphical pipelines and one of said display devices, ~~configured to interface with said one display said graphical data rendered by said first and second graphical pipelines.~~

2. (Currently Amended) The system of claim 1, wherein:

said first graphical pipeline is configured to mathematically combine a first offset with coordinate values included in said graphical data rendered by said first graphical pipeline;

said second graphical pipeline is configured to mathematically combine a second offset with coordinate values included in said graphical data rendered by said second graphical pipeline; and

said compositor is configured to blend color values associated with corresponding coordinate values within said graphical data rendered by said first and second graphical pipelines.

3. (Currently Amended) The system of claim 1, ~~wherein said first graphical pipeline is configured to discard said graphical data rendered by said second graphical pipeline, and wherein said second graphical pipeline is configured to discard said graphical data rendered by said first graphical pipeline.~~

4. (Currently Amended) The system of claim 3, wherein said first graphical pipeline is configured to receive an input identifying a first coordinate range and is configured to discard said graphical data rendered by said second pipeline based on said first coordinate range, and wherein said second graphical pipeline is configured to receive an input identifying a second coordinate range and is configured to discard said graphical data rendered by said first graphical pipeline based on said second coordinate range.

5. (Original) The system of claim 3, wherein said first graphical pipeline is further configured to super sample said graphical data rendered by said first graphical pipeline, and wherein said second graphical pipeline is further configured to super sample said graphical data rendered by said second graphical pipeline.

6. (Original) The system of claim 5, wherein said compositor is configured to blend color values included in said graphical data rendered by said first and second graphical pipelines.

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7. (Currently Amended) A single logical screen (SLS) graphical display system, comprising:

~~means for receiving a graphical command;~~

~~first rendering means for rendering graphical data from a first graphical command received by said first rendering means, said a first portion of graphical data included within said graphical command, said first rendering means including a plurality of pipeline means for rendering, in parallel, said first graphical data portion in parallel from said first graphical command and a compositing means for compositing said first rendered portion graphical data rendered by said first plurality of pipeline means, each of said first plurality of pipeline means configured to render at least a portion of said graphical data from said first graphical command;~~

~~second rendering means for rendering graphical data from a second graphical command received by said second rendering means, said a second portion of said graphical data, said second rendering means including a plurality of pipeline means for rendering, in parallel, said second graphical data portion in parallel from said second graphical command and a compositing means for compositing said second rendered portion graphical data rendered by~~

said second plurality of pipeline means, each of said second plurality of pipeline means configured to render at least a portion of said graphical data from said second graphical command;

first display means for displaying a first image based on ~~said first composited portion~~ graphical data composited by said compositing means of said first rendering means; and

second display means for displaying a second image based on ~~said second composited portion~~ graphical data composited by said compositing means of said second rendering means,

wherein said first and second images define at least a portion of a single logical screen image.

8. (Currently Amended) The system of claim 7, wherein each of said plurality of pipeline means of said first rendering means includes a means for mathematically combining a different offset to coordinate values included in said first graphical data portion from said first graphical command, and wherein said compositing means of said first rendering means includes a means for blending color values associated with corresponding coordinate values within said first graphical data portion from said first graphical command.

9. (Currently Amended) The system of claim 7, wherein said first rendering means includes a means for receiving an input identifying a coordinate range, and wherein one of said plurality of pipeline means of said first rendering means includes a means for discarding, based on said coordinate range, graphical data from said first graphical data ~~portion based on said coordinate range~~ command.

10. (Currently Amended) The system of claim 9, wherein each of said plurality of pipeline means of said first rendering means is configured to super sample graphical data from said first graphical data ~~portion~~ command, and wherein said compositing means of said first rendering means includes a means for blending color values included in said super sampled graphical data.

11. (Currently Amended) A single logical screen (SLS) graphical display method, comprising:

receiving graphical data defining an image;

rendering different portions of said graphical data via different ones of a plurality of graphical acceleration units;

in each of said graphical acceleration units, compositing the graphical data rendered by said each graphical acceleration unit; and

displaying said image across a plurality of display devices as a single logical screen, said displayed image based on said composited graphical data,

wherein said rendering comprises rendering, in ~~each~~ one of said graphical acceleration units, ~~a respective one of said graphical data from a single graphical command portions~~ via each of a plurality of pipelines.

12. (Currently Amended) The method of claim 11, wherein said rendering further comprises mathematically combining different offsets with coordinate values included in ~~one of said graphical data portions~~ said graphical data from said single graphical command, and wherein said compositing comprises blending color values associated with said coordinate values.

13. (Currently Amended) The method of claim 11, further comprising:
receiving an input identifying a coordinate range; and
discarding, via one of said plurality of graphical pipelines, graphical data from ~~one of~~
~~said portions~~ said single graphical command based on said coordinate range.

14. (Currently Amended) The method of claim 13, wherein said rendering further
comprises super-sampling graphical data from ~~one of said portions~~ said single graphical
command, and wherein said compositing further comprises blending color values included in
said super sampled graphical data.

15. (Canceled)

16. (Previously Presented) The system of claim 1, further comprising a graphics
application, wherein each of the portions of said graphical data rendered by said plurality of
graphical acceleration units is transmitted from said graphics application.

17. (Currently Amended) The system of claim 2, wherein said first and second
graphical pipelines, by respectively combining said first and second offsets with coordinate
values in said graphical data rendered by said first and second graphical pipelines, offsets an
image defined by said graphical data rendered by said first graphical pipeline with respect to an
in image defined by said graphical data rendered by said second graphical pipeline such that said
compositor defines a jitter enhanced image by blending said color values.

18. (Canceled)

19. (Previously Presented) The method of claim 11, further comprising transmitting each of said portions of said graphical data from a single graphics application.

20. (Currently Amended) The method of claim 12, wherein said combining causes said compositing to jitter enhance an said image defined by said graphical data.

21. (Currently Amended) A single logical screen (SLS) graphical display system, comprising:

an interface configured to receive a graphical ~~command~~ data defining an image;

a plurality of display devices; and

a plurality of graphical acceleration units, each of said graphical acceleration units ~~respectively~~ interfaced with a respective one of said plurality of display devices and configured to render, in parallel, a different portion of said graphical data included in said graphical command such that said display devices display said image as a single logical screen, each of said graphical acceleration units comprising a plurality of graphical pipelines and a compositor, wherein one of said graphical acceleration units is configured to render at least a portion of a three-dimensional graphical object, each of the plurality of graphical pipelines of said one graphical acceleration unit configured to render, in parallel, at least a portion of said three-dimensional graphical object, and wherein the compositor of said one graphical acceleration unit is configured to composite said graphical data portion rendered by said each graphical acceleration unit plurality of graphical pipelines of said one graphical acceleration unit.

22. (Currently Amended) The system of claim 21, wherein each one of said graphical acceleration units comprises a plurality of graphical pipelines, each of said plurality of graphical pipelines of said one graphical acceleration unit is configured to mathematically combine a different offset to corresponding coordinate values of the graphical data defining said three-dimensional graphical object portion rendered by said one graphical acceleration unit such that the said compositor of said one graphical acceleration unit jitter enhances an image defined by said graphical data portion rendered by said one graphical acceleration unit said three-dimensional graphical object.

23. (Currently Amended) The system of claim 21, wherein each one of said graphical acceleration units comprises a plurality of graphical pipelines, each of said plurality of graphical pipelines of said one graphical acceleration unit is configured to render only a different portion of the graphical data portion rendered by said one graphical acceleration unit said three-dimensional graphical object.

24. (Currently Amended) The system of claim 21, wherein each one of said graphical acceleration units comprises a plurality of graphical pipelines, each of said graphical pipelines of said one graphical acceleration unit is configured to render and super sample only a different portion of the graphical data portion rendered by said one graphical acceleration unit said three-dimensional graphical object.

25. (Currently Amended) A single logical screen (SLS) graphical display method, comprising:

receiving a graphical ~~command~~ data defining an image;

displaying ~~at least a portion of a single logical screen~~ said image via a plurality of display devices as a single logical screen; and

for each of said display devices, rendering in parallel a different portion of said graphical data included in said graphical command and compositing said rendered portion,

wherein said rendering comprises rendering, in parallel for a single one of said display devices, at least a portion of a three-dimensional graphical object via a plurality of graphical pipelines.

26. (New) The system of claim 1, wherein said at least one graphical acceleration unit comprises an interface coupled to said first graphical pipeline via a first local area network (LAN) connection and coupled to said second graphical pipeline via a second LAN connection, said interface of said at least one graphical acceleration unit configured to transmit said graphical command to said first and second graphical pipelines via said first and second LAN connections.

27. (New) The system of claim 1, wherein said second graphical command is configured to discard, without rendering, all graphical data in said graphical command.

28. (New) The system of claim 1, wherein said graphical command defines an image to be displayed by said one display device interfaced with said compositor, and wherein said graphical data rendered by said first graphical pipeline entirely defines said image to be displayed by said one display device interfaced with said compositor.

29. (New) The system of claim 28, wherein said second graphical pipeline is configured to discard, without rendering, said graphical data from said graphical command.

30. (New) The system of claim 28, wherein said second graphical pipeline is configured to render said graphical data from said graphical command.

31. (New) The system of claim 7, wherein said first rendering means comprises a first plurality of local network (LAN) connections, each of said first plurality of pipeline means configured to receive, from a different one of said first plurality of LAN connections, a respective portion of said graphical data from said first graphical command, and wherein said second rendering means comprises a second plurality of local network (LAN) connections, each of said second plurality of pipeline means configured to receive, from a different one of said second plurality of LAN connections, a respective portion of said graphical data from said second graphical command.

32. (New) The method of claim 11, further comprising transmitting, in said one graphical acceleration unit, graphical data from said single graphical command to each of said plurality of pipelines via a different local area network (LAN) connection.

33. (New) The system of claim 21, wherein said one graphical acceleration unit comprises an interface configured to transmit, to each of said plurality of graphical pipelines, each three-dimensional graphical command received by said one graphical acceleration unit.

34. (New) The system of claim 32, wherein said interface is coupled to each of said plurality of pipelines via a different local area network (LAN) connection.

35. (New) The system of claim 21, wherein said one graphical acceleration unit comprises an interface configured to transmit, to each of said plurality of graphical pipelines, a plurality of three-dimensional graphical commands, wherein at least one of said plurality of graphical pipelines is configured to discard, without rendering, all graphical data in one of said graphical commands.

36. (New) The system of claim 35, wherein said interface is coupled to each of said plurality of pipelines via a different local area network (LAN) connection.

37. (New) The method of claim 25, further comprising transmitting, to each of said graphical pipelines, each three-dimensional graphical command having graphical data to be rendered by said single one of said display devices.